

Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (Currently Amended) A laser apparatus which supplies a laser beam to an exposure device, comprising:
 - a laser element that emits ~~[[a]]~~ pulses of the laser beam, the laser element including a laser resonator;
 - a detector that detects the laser beam emitted from the laser beam body; and
 - a controller that controls the laser element to emit the laser beam under a plurality of emission conditions in a ready state, and ~~controls the detector to detect the laser beam emitted in the ready state~~ forms plural pieces of control data corresponding to the respective emission conditions based on detection results of the detector, the plurality of emission conditions being different from each other in at least one of an energy of the laser beam and an emission period of the laser beam,
 - wherein the controller selects one of the plural pieces of control data for controlling the laser element when the laser beam emitted from the laser element is supplied to the exposure device.
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Currently Amended) The laser apparatus of claim ~~[[3]]~~ 1, wherein the laser beam is emitted by applying a ~~predetermined~~ voltage to the laser element, and

the controller adjusts the voltage supplied to the laser element ~~during a usage state, in which the laser beam is emitted outside~~, based on the selected control data.

6. (Currently Amended) The laser apparatus of claim ~~[[3]]~~ 1, further comprising a circulating device that circulates gas in the laser element, wherein the controller controls the circulating device ~~during a usage state, in which the laser beam is emitted outside~~, based on the control data generated in the ready state when the laser beam emitted from the laser element is supplied to the external device.

7. (Original) The laser apparatus of claim 6, wherein the circulating device includes a fan for circulating the gas in the laser element, and the controller adjusts the rotating speed of the fan to adjust the circulation of the gas in the laser element.

8. (Original) The laser apparatus of claim 6, wherein the emission conditions include a circulating speed of the gas in the laser element, and the emission conditions are changed by changing the circulating speed.

9. (Currently Amended) The laser apparatus of claim ~~[[3]]~~ 1, wherein the controller adjusts the pressure of gas in the laser element.

10. (Original) The laser apparatus of claim 9, wherein the emission conditions include a pressure of the gas in the laser element, and the emission conditions are changed by changing the pressure.

11. (Currently Amended) A method of controlling a laser apparatus that emits supplies a laser beam to an exposure device, comprising ~~the steps of:~~
emitting ~~[[a]]~~ pulses of the laser beam under a plurality of emission conditions during a ready state in which the laser beam is not directed ~~outside of the laser~~

apparatus to the exposure device, the plurality of emission conditions being different from each other in at least one of an energy of the laser beam and an emission period of the laser beam; and

detecting the emitted laser beam in the ready state;

forming, on the basis of information obtained by detecting the laser beam in the ready state, plural pieces of control data corresponding to the respective emission conditions;

selecting one of the plural pieces of control data; and

supplying the laser beam to the exposure device while controlling an emission of the laser beam of the laser apparatus based on the selected control data.

12. (Withdrawn) An apparatus that exposes a substrate by illuminating a pattern formed on a mask with a laser beam and projecting an image of the pattern on the substrate, the apparatus comprising:

a laser source including a laser element to emit a laser beam;

an illumination unit disposed in a path of the laser beam, that guides the laser beam emitted from the laser source to the mask;

a detector, at least part of the detector being disposed in the path of the laser beam, that detects the laser beam emitted from the laser source; and

a controller functionally associated with the laser source and the detector, that controls the laser source to emit the laser beam under a plurality of emission conditions in a ready state and controls the detector to detect the laser beam emitted from the laser element in the ready state.

13. (Withdrawn) A method that exposes a substrate by illuminating a pattern formed on a mask with a laser beam and projecting an image of the pattern on the substrate, the method comprising the steps of:

emitting the laser beam under a plurality of emission conditions during a ready

state in which illumination of the mask with the laser beam is prevented;
detecting the emitted laser beam in the ready state; and
adjusting the emission of the laser beam to be illuminated on the mask based on the detection result.

14. (Currently Amended) A laser apparatus that emits a laser beam to an external device, comprising:

a laser element that emits the laser beam, the laser element including a laser resonator; and

a laser controller, connected to the laser element and the external device, that receives information from the external device and controls the emission of the laser beam from the laser element, wherein the controller determines an emission condition of the laser beam based on the information during a ready state, in which the external device does not use the laser beam, ~~based on the information~~ and
wherein the information includes an emission condition of the laser beam used in an operation which is performed by the external device after the ready state.

15. (Cancelled)

16. (Cancelled)

17. (Original) The laser apparatus of claim 14, wherein the information includes a target energy of the laser beam emitted from the laser element.

18. (Original) The laser apparatus of claim 14, wherein the laser element emits pulses of the laser beam with an emission frequency, and the information includes the emission frequency of the laser beam.

19. (Original) The laser apparatus of claim 14, wherein the external device includes an exposure device that exposes a substrate by irradiating a mask with the laser beam emitted from the laser element and projecting a pattern image of the mask on the substrate.

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) The laser apparatus of claim ~~[[21]]~~ 19, wherein the operation of the exposure device includes the exposure of the substrate.

23. (Withdrawn) An exposure apparatus that exposes a substrate by irradiating the substrate with a laser beam, comprising:

a laser apparatus including,

a laser element to emit the laser beam, and

a laser controller to control the emission of the laser beam;

a beam directing system disposed in a path of the laser beam that directs the laser beam emitted from the laser element to the substrate; and

an exposure controller connected to the laser controller that provides the laser controller information for determining an emission condition of the laser beam during a ready state in which the laser beam emitted from the laser element is not guided outside of the laser apparatus.

24. (Withdrawn) The exposure apparatus of claim 23, wherein the information includes an emission condition of the laser beam from the laser element in the ready state.

25. (Withdrawn) The exposure apparatus of claim 23, wherein the information includes an emission condition of the laser beam when the laser beam is to be used, after the ready state, in an operational in which the laser beam is guided outside of the laser apparatus.

26. (Withdrawn) The exposure apparatus of claim 25, wherein the emission condition includes a conditions used in the operation for exposure of the substrate.

27. (Withdrawn) The exposure apparatus of claim 23, wherein the information includes a target energy of the laser beam to be output from the laser element.

28. (Withdrawn) The exposure apparatus of claim 23, wherein the laser element emits pulses of the laser beam with an emission frequency, and the information includes the emission frequency of the laser beam.

29. (Withdrawn) The exposure apparatus of claim 23, further comprising a detector for detecting the laser beam emitted from the laser element in the ready state, and wherein the laser controller prepares control data for use in an operation which is performed after the ready state based on the emission condition of the laser beam used in the ready state and the detection result of the detector, the laser beam being directed outside of the laser apparatus in the operation.

30. (Withdrawn) A method for fabricating a device comprising the steps of:
providing an exposure apparatus, the apparatus including a laser apparatus which has a laser element to emit a laser beam and a laser controller to control the emission of the laser beam, a beam directing system that directs the laser beam emitted from the laser element to a substrate, and an exposure controller that provides

the laser controller information for determining an emission condition of the laser beam during a ready state in which the laser beam emitted from the laser element is not guided outside of the laser apparatus; and

exposing the substrate by irradiating the substrate with the laser beam emitted from the laser element.

31. (New) The laser apparatus of claim 5, wherein the selected control data includes the relationship between the target energy of the laser beam and the voltage.

32. (New) The laser apparatus of claim 11, wherein the selected control data includes the relationship between a target energy and a voltage supplied to the laser apparatus.

33. (New) The apparatus of claim 14, further comprising a detector which detects the laser beam emitted from the laser element, wherein the laser controller forms control data based on detection results of the detector obtained in the ready state.